

Application No.: 10/038035

Docket No.: 10253-00145-US

**REMARKS**

The outstanding Office Action and applied art have been carefully considered. Claims 1-10 are pending in the application. Claims 11-19 have been previously withdrawn from consideration. Reconsideration of the application is respectfully requested.

In the outstanding Office Action, claims 1-18 were rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph, as failing to set forth the subject matter which applicant(s) regard as the invention; and claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Huffman (U.S. Patent No. 4,043,749) or Kelley (U.S. Patent No. 5,131,918) or Anton (U.S. Patent No. 4,078,378) in view of Elgarhy et al (U.S. Patent No. 5,549,963), Elgarhy (U.S. Patent No. 5,681,620), Collier (U.S. Patent No. 6,387,448), Buck (U.S. Patent No. 5,725,889) and Pacifici (U.S. Patent No. 5,925,149).

**35 U.S.C §112 Rejections**

Claims 1-18 were rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph, as failing to set forth the subject matter which applicant(s) regard as the invention. Applicant respectfully submits that claims 11-19 have been previously withdrawn from consideration. Applicants respectfully traverse the rejection regarding the pending claims 1-10.

The outstanding Office Action has noted that the arguments of the previous response emphasized avoidance of the use of steam in the method of the present invention. In particular, the outstanding Office Action suggests that this line of argument indicates steam would be a critical element of the invention and that "any critical limitations must be claimed."

However, it is respectfully submitted that the present response in no way suggests that avoidance of steam is a "critical limitation" of the present invention. Instead, the present response argues limitations that are positively recited and explicitly a part of the original claim language. Therefore, Applicants respectfully submit that the present claims do set forth the subject matter which Applicants regards as the invention.

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**35 U.S.C §103 Rejections**

Claims 1-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman or Kelly or Anton in view of Elgarhy et al., Elgarhy, Collier, Buck, and Pacifici. Applicants respectfully traverse the rejection.

Huffman teaches a process for dyeing nylon carpet using a cationic dye and an acid dye.<sup>1</sup> Kelly discloses the process for making multicolored carpet by dyeing the acid dyeable fibers a desired color while leaving the cationic portion undyed.<sup>2</sup> Anton discloses a polyamide filament that has an acid dyeable polyamide core surrounded by a cationic dyeable polyamide sheath.<sup>3</sup> As indicated in the outstanding Office Action, Huffman, Kelly and Anton each disclose dyeing the polyamide fibers or carpets "with both acid dyes and cationic dyes."<sup>4</sup>

However, neither Huffman, Kelly nor Anton implicitly or explicitly disclose, as recited in claim 1:

passing the textile surface of the article through a bath containing a *stainblocker composition and a surfactant* (emphasis added).

That is, neither Huffman, Kelly nor Anton disclose a dyed substrate with a stainblocker, as recited in claim 1 of invention.

Therefore, it is respectfully submitted that neither Huffman, Kelly nor Anton, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Elgarhy et al discloses the method of making a partially phosphated and partially sulfonated resol resin.<sup>5</sup> In particular, Elgarhy et al discloses using a "treating solution" for nylon 66 samples with 2.0% resol "at a pH of 2.5 and at 75°C for a period of 20 minutes."<sup>6</sup>

In contrast to Elgarhy et al, the claimed invention recites: "the textile surface remaining in the bath for about *five (5) to about thirty (30) seconds*." In a scenario where a stainblocker

<sup>1</sup> Huffman at column 2, lines 45 - 49.

<sup>2</sup> Kelley at column 2, lines 36 - 39.

<sup>3</sup> Anton at Abstract.

<sup>4</sup> Office Action mailed March 10, 2004, page 2, paragraph 4, and lines 1-3.

<sup>5</sup> Elgarhy et al at column 2, lines 45 - 48.

<sup>6</sup> *Id.* at column 8, lines 59 - 62.

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were applied to a textile surface for the period of time (i.e., 20 minutes) as disclosed in Elgarhy et al., "the cationic dyestuff bleeds from the cat dyeable yarn into the surrounding stainblocker treatment bath."<sup>7</sup> It should be noted that the recitation of the previous sentence is a part of the application disclosure that describes just such a scenario in the section entitled "Problem With Conventional Methods" as resulting in "an unacceptable visual color change."<sup>8</sup> That is, the application explicitly teaches away from treatments of relatively long duration (i.e., greater than "5 to 30 seconds," as recited in claim 1).

In addition, Elgarhy et al. discloses that the resol products may be applied using methods such as padding, foam, flooding or spray.<sup>9</sup> The outstanding Office Action appears to interpret method of padding disclosed by Elgarhy et al. as the same as the method recited in the claimed invention.<sup>10</sup> However, as discussed above, the method of Elgarhy et al. does disclose using a "treating solution" for nylon 66 samples with 2.0% resol "at a pH of 2.5 and at 75°C for a period of 20 minutes."<sup>11</sup>

In contrast to Elgarhy et al., the claimed invention, as recited in claim 1 includes: "the textile surface remaining in the bath for about *five (5) to about thirty (30) seconds*." That is, the textile surface in the claimed invention is in the bath for a very short time (i.e., 5 to 30 seconds) as compared to the period of time (i.e., 20 minutes) the textile surface spends in the treatment bath as disclosed by Elgarhy et al. Thus, Elgarhy et al. does not disclose a method of that is the same as the method of the claimed invention.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Elgarhy et al., whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Elgarhy discloses the process for imparting stain resistance, light fastness and wash fastness to a fibrous substrate.<sup>12</sup> The chemical composition includes a water soluble sulfonated

<sup>7</sup> Specification at page 5, lines 1-4.

<sup>8</sup> *Id.* at page 4, line 34; to page 5, line 4.

<sup>9</sup> See Elgarhy et al. at column 6, lines 44 - 49.

<sup>10</sup> See Office Action at page 3, paragraph 1, and lines 9-14.

<sup>11</sup> See Elgarhy et al. at column 8, lines 59 - 62.

<sup>12</sup> Elgarhy at Abstract.

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aromatic-aldehyde condensation product, and hydrofluorosilicic acid or a water soluble salt.<sup>13</sup>

The carpet is usually treated for between 20 to 30 minutes at 160 - 170°F.<sup>14</sup>

However, Elgarhy nowhere discloses, as recited in claim 1:

passing the textile surface of the article through a bath containing a stainblocker composition and a surfactant, the bath having a temperature from above seventy to ninety-five degree Celsius (70 to 95°C), the textile surface remaining in the bath for about five (5) to about thirty (30) seconds (emphasis added).

In fact, as discussed above, if a stainblocker is applied on the textile surface for the period of time (i.e., 20 minutes) disclosed in Elgarhy, "the cationic dyestuff bleeds from the cat dyeable yarn into the surrounding stainblocker treatment bath," as described in the specification.<sup>15</sup> It should be noted that the recitation of the previous sentence is a part of the application disclosure that describes just such a scenario in the section entitled "Problem With Conventional Methods" as resulting in "an unacceptable visual color change."<sup>16</sup> That is, the application explicitly teaches away from treatments of relatively long duration (i.e., greater than "5 to 30 seconds," as recited in claim 1).

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Elgarhy, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Collier et al. discloses the method of treating a substrate for bleach resistance.<sup>17</sup> The chemical composition includes a component selected from the groups of an anionically modified phenol formaldehyde polymer, a naphthalene condensate, a lignin sulfonate, methacrylic polymer, polyester, and water.<sup>18</sup> Steam is used with a stain resist product and the steam time is from 2 to 8 minutes.<sup>19</sup>

<sup>13</sup> *Id.* at column 2, lines 55 - 60.

<sup>14</sup> *Id.* at column 7, lines 30 -32.

<sup>15</sup> See Specification at page 5, lines 3-4.

<sup>16</sup> *Id.* at page 4, line 34; to page 5, line 4.

<sup>17</sup> Collier et al at Abstract.

<sup>18</sup> *Id.* at Abstract.

<sup>19</sup> *Id.* at column 7 lines 45 - 50.

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As discussed above, if the carpet is treated for a relatively long period of time (i.e., relative to the "5 to 30 seconds" recited in claim 1), the cationic dyestuff bleeds from the cat dyeable yarn into the surrounding stainblocker treatment bath. Adding steam to the method would further accelerates the bleeding process that the claimed invention is attempting to avoid, as discussed above. Thus, Collier et al teaches away the claimed invention by using steam.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Collier, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Buck discloses a process for treating polyamide and wool substrates with resole stain-resists at a pH on the range between 6 and 7.<sup>20</sup> In addition, Buck discloses the nylon carpet is treated at 65 °C for 10 to 20 minutes.<sup>21</sup>

However, Buck nowhere discloses, as claim 1, recites:

passing the textile surface of the article through a bath containing a stainblocker composition and a surfactant, the bath having a temperature from above seventy to ninety-five degree Celsius (70 to 95°C), the textile surface remaining in the bath for about five (5) to about thirty (30) seconds (emphasis added).

That is, Buck discloses the carpet as being treated for a relatively long time (i.e., 10 to 20 minutes versus "5 to 30 seconds," as recited in claim 1). As discussed above and in the present application, a treatment of this duration results in "cationic dyestuff bleeds from the cat dyeable yarn into the surrounding stainblocker treatment bath."

In addition, in contrast to Buck which discloses the carpet being "treated at 65°C," the claimed invention uses a treatment bath "having a temperature from seventy to ninety-five degree Celsius (70 to 95°C)," as recited in claim 1 (emphasis added).

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Buck, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

<sup>20</sup> Buck at column 1, lines 5 - 9; and column 2, lines 49 - 55.

<sup>21</sup> *Id.* at column 6, lines 2-5.

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Pacifici discloses a method of dyeing nylon fiber with a first anionic dye and treated with a stainblocker.<sup>22</sup> In addition, Pacifici discloses the dyed nylon fiber is mixed with the nylon fiber *untreated by a stainblocker*. Further, Pacifici discloses the fiber is dyed with a second anionic dye of a color different from the color of the first anionic dye.<sup>23</sup>

However, Pacifici nowhere discloses, as claim 1, recites:

passing the textile surface of the article through a bath containing a stainblocker composition and *a surfactant*, the bath having a temperature from above seventy to ninety-five degree Celsius (70 to 95°C), the textile surface remaining in the bath for about *five (5) to about thirty (30) seconds* (emphasis added).

In fact, as discussed above, the process of Pacifici is totally different from the invention of claim 1. That is, Pacifici nowhere discloses passing the differential dyed (i.e., anionic dyed and cationic dyed) yarns through a bath with a "stainblocker" in "5 to 30 seconds," as recited in claim 1.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Pacifici, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

In view of the above, each of the claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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<sup>22</sup> Pacifici at Abstract.

<sup>23</sup> *Id.* at column 3 lines 61 - 65.

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Applicant believes no fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 10253-00145-US from which the undersigned is authorized to draw.

Dated: June 9, 2004  
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Respectfully submitted,

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